|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Neighbour | C1 = [0,0] | C2 = [0,1] | C3 = [0,2] | C4 = [1,0] | C5 = [1,1] | C6 = [1,2] | C7 = [2,0] | C8 = [2,1] | C9 = [2,2] |
| N1 | Grid[row, col - 1] | 0, 2 | 0, 0 | 0, 1 | 1, 2 | 1, 0 | 1, 1 | 2, 2 | 2, 0 | 2, 1 |
| N2 | Grid[row, col + 1] | 0, 1 | 0, 2 | 0, 0 | 1, 1 | 1, 2 | 1, 2 | 2, 1 | 2, 2 | 2, 0 |
| N3 | Grid[row - 1, col] | 2, 0 | 2, 1 | 2, 2 | 0, 0 | 0, 1 | 0, 2 | 1, 0 | 1, 1 | 1, 2 |
| N4 | Grid[row + 1, col] | 1, 0 | 1, 1 | 1, 2 | 2, 0 | 2, 1 | 2, 2 | 0, 0 | 0, 1 | 0, 2 |
| N5 | Grid[row - 1, col - 1] | 2, 2 | 2, 0 | 2, 1 | 0, 2 | 0, 0 | 0, 1 | 1, 2 | 1, 0 | 1, 1 |
| N6 | Grid[row - 1, col + 1] | 2, 1 | 2, 2 | 2, 0 | 0, 1 | 0, 2 | 0, 0 | 1, 1 | 1, 2 | 1, 0 |
| N7 | Grid[row + 1, col – 1] | 1, 2 | 1, 0 | 1, 1 | 2, 2 | 2, 0 | 2, 1 | 0, 2 | 0, 0 | 0, 1 |
| N8 | Grid[row + 1, col + 1] | 1, 1 | 1, 2 | 1, 0 | 2, 1 | 2, 2 | 2, 0 | 0, 1 | 0, 2 | 0, 0 |

For row wrap = GetUpperBound(0)

For cell wrap = GetUpperBound(1)